Gulf of Maine Harbor Porpoise Take Reduction Team
December 14-15, 1999

Final Meeting Summary

This is a summary of the Harbor Porpoise TRT meeting held December 14-15, 1999. It is only a summary and should not be construed to represent all views of all parties on each item discussed. Time constraints limited parties from expressing all their concerns.

prepared by

RESOLVE

Contact Robert Fisher with questions 202.965.6207.

Gulf of Maine Harbor Porpoise Take Reduction Team
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Final Meeting Summary

The meeting of the Gulf of Maine Harbor Porpoise Take Reduction Team (TRT) began with introductions of the participants (see Attachment A), and review and adoption of the meeting agenda (see Attachment B). Numerous documents were referred to and distributed during the meeting (see Attachment C for a list). Although those documents have not been attached to this summary to avoid distributing multiple copies to the TRT and other meeting participants, they are necessary to fully understand what was discussed at the meeting.[1]

The primary purposes of the meeting were to:

- review the elements of the Harbor Porpoise Take Reduction Plan (Plan),
- discuss how the Plan is working and identify areas of improvement, and
- reach consensus, where possible, on approaches to address those aspects of the Plan that need improvement.

Chris Mantzaris, NMFS' Assistant Administrator for Protected Resources in the Northeast, opened the meeting by commending the TRT for their efforts in helping NMFS develop the Plan. He indicated that 1999 bycatch through the month of August was 237 (184 animals from the Northeast sink gillnet fishery and 53 animals from the Mid-Atlantic coastal gillnet fishery). Although additional takes have been observed -- and it is not known whether the final annual bycatch for 1999 will still be below PBR -- NMFS was encouraged by the apparent reduced take. NMFS needs to determine how the reduction in takes was accomplished, whether through the HPTRP regulations, fishery management actions, variable porpoise behavior, or a combination of these factors. Mr. Mantzaris also welcomed three new members to the TRT: Peter Innis, Don King, and Mark Roberts.

Consensus Recommendations

The TRT reached consensus at the meeting on a number of recommendations, which are set forth on Attachment D.

Activities since the Last Meeting (December 1997)

TRP Development and Implementation Schedule. NMFS presented an overview of the development of the Plan and the implementation timeline. NMFS may hold a combined Gulf of Maine and Mid-Atlantic TRT meeting in mid-summer 2000 to review the complete 1999 and early 2000 bycatch estimates and to discuss whether there should be changes to the rule implementing the plan. If so, NMFS would publish a proposed rule for the revised HPTRP in mid-September, and a final rule in mid-November. The revised rule would be effective January

[1] Copies of the documents may be obtained by contacting RESOLVE or Kim Thounhurst at the National Marine Fisheries Service at 978.281.9138.

1, 2001. The Marine Mammal Protection Act established a deadline of April 30, 2001 to reach the Zero Mortality Rate Goal (ZMRG), a level approaching but not necessarily equal to zero.

A notice was published in the *Federal Register* (See *Federal Register* Notice – 63 FR 71041, December 23, 1998) to correct the boundaries of the closure areas.

Proposed ESA Listing of Harbor Porpoise. NMFS determined that listing the Harbor Porpoise as threatened under the Endangered Species Act was not warranted due primarily to the proposed reductions in the Plan and withdrew the listing proposal. The Harbor Porpoise was kept on the ESA candidate species list.

CMC/HSUS Lawsuit. NMFS was sued by the Center for Marine Conservation (CMC) and the Humane Society of the United States (HSUS) in August 1998 over failure to meet deadlines for developing a plan to reduce PBR and to make the listing determination under the ESA. A settlement was reached in October 1998 and provided for, among other things, the following:

- the Plan to become effective January 1, 1999
- the phased-in use of pingers in the Gulf of Maine/Bay of Fundy, if NMFS requires them in the plan, subject to availability and training in their use
- NMFS to make the listing determination under the ESA by January 4, 1999
- NMFS to conduct a biological status review of harbor porpoise and determine by March 31, 2000 whether the listing decisions should be revisited
- NMFS to make bycatch data available through the end of July 2001 and to provide information to the public on a quarterly basis.

Some members of the TRT expressed concerns about the impact of the lawsuit on the Plan. Representatives from the fishing industry expressed concerns about the lawsuit including, not being involved in the negotiations and having limited time to comment on the development of the final plan. NMFS indicated that there was an attempt to have the usual 30-day cooling off period.

Summary of Bycatch for 1998 – August 1999. Debra Palka, NMFS Northeast Fisheries Science Center in Woods Hole, MA (Center) reviewed the information on bycatch estimates for 1998 and January-August 1999 and the location of harbor porpoise takes during September 1 to November 30, 1999. (See "History of Bycatch Estimates of the GOM/BOF Harbor Porpoise Population"). She also reported there was one additional take in early December.

The bycatch estimates are from a scientific sampling program and have a 95% confidence interval. The seasonal bycatch estimates are different than the preliminary estimates presented at the 1997 TRT meeting. Bycatch occurred mostly in the winter, with little over the summer as most harbor porpoise usually are north of Penobscot Bay and not in the Gulf of Maine. During the fall months, closures are in effect and pingers are required.

Dr. Palka reported that the estimated bycatch numbers for the Canadian gillnet fisheries are based on takes observed during a sampling program and then extrapolated to the entire fishery, while the takes from the herring weir fishery are the actual numbers observed. It was noted that pingers have been used in Canada since 1995.

Members of the TRT raised questions about the methodology used in preparing the bycatch estimates, including which data fields were used, how use of pingers was accounted for and the pro ration scheme. In discussing the methodology, Dr. Palka indicated that landings data were collected differently in 1994 than now, weigh-out data provides the best estimate of landings, and the vessel trip report (VTR) is used to allocate the landings to specific regions of the ocean.

Harbor Porpoise Take Reduction Plan Regulatory Elements and Related Management Actions

Closures. Kim Thounhurst of NMFS reviewed the closures required by the Plan and the Atlantic Large Whale take reduction plan. Chris Kellogg of the New England Fishery Management Council reviewed closures under Fishery Management Plans. (See "Multispecies Framework Adjustments 25-27" and Multispecies Area Closures Options for 2000 –2001 Fishing Year.") In addition, there probably will be extensive rolling closures as part of the Groundfish plan, rather than trip limits or limitations on days-at-sea, and the year round Western Gulf of Maine closure that includes Jeffreys Ledge would be reviewed by the Council to consider the possibility of replacing this closure with other measures. (See later discussion on future Multispecies management measures potentially affecting the HPTRP.) Some fishers pointed out that the fishery management actions were superseding efforts under the Plan and that herring management was an important consideration. Also, the fishers feel the impact of those actions before showing up in the data. Richard Merrick from the Center reported that a new population estimate for harbor porpoise would be released in January, and the numbers are expected to be similar to current estimates.

The TRT discussed the potential implications for harbor porpoise bycatch if stocks of fish, particularly cod, are replenished and effort is allowed to increase. The Marine Mammal Protection Act does not address what happens after April 2001 or if ZMRG is not met. A fisherman questioned whether once the harbor porpoise population was stabilized there would be a decrease in regulatory actions even if landings increased. It was noted that, if the harbor porpoise population increases, then so do PBR and ZMRG. Therefore, additional regulations may not be needed if the take is below these higher levels.

Pinger Certifications. Glenn Salvador of NMFS reported on the status of mandatory pinger certifications. As of the meeting, 295 fisherman have attended workshops regarding the intent of the Plan and the characteristics of pingers and to be certified on the use and maintenance of pingers. The observer protocol requires the number of pingers to be counted but no testing to determine whether the pingers are working. The TRT made recommendations regarding checking pingers. (See Attachment D.)

Observer Coverage Compliance. Amy Williams of the NMFS Sea Sampling Program reported on compliance with the requirement to take observers. Compliance was better in 1999. There are 30 observers covering Maine to North Carolina. There were more refusals to take observers in the Mid-Atlantic. Specific problems include safety concerns, lack of room for observers on board, or vessels leaving the dock without the observer prior to the scheduled time.

HPTRP Compliance. Chris Mantzaris reported on enforcement activities related to the HPTRP. The Coast Guard has a standing order to check nets for pingers. However, no citations or violations have been noted because the Coast Guard requires that the vessel owner be at the net when it is tested. NMFS is working to have a person dedicated to protected species enforcement. Observers and the information they collect are not used for enforcement purposes. The following suggestions were made regarding compliance monitoring:

- NMFS should work with the USCG to prepare an enforcement plan for the HPTRP and present it to the TRT;
- determine whether pingers are functioning;
- a tool is needed for observers to determine whether pingers are working;
- develop a pinger monitoring program, *e.g.*, observers could randomly sample pingers to determine whether they are working;
- NMFS needs to deal with fishers who do not follow the rules, including more outreach to inform fishers about the requirements;
- penalties for violations should be significant, including revocation of permits.

Operational Concerns from Fishing Industry. The fishing industry identified the following concerns regarding the use of pingers:

- battery changes are difficult – technology could improve,
- fish damage by seals – may be a sound frequency issue,
- pingers get caught in the net, some gear destruction,
- weight – pingers are too heavy, they can damage boat and people in heavy seas,
- plastic piece on pinger that holds batteries breaks (put lobster band around pack),
- pingers need a larger hole for attachment to the bridle,
- pingers are currently available from only one vendor,
- saltwater switch (i. e. NMFS should obtain pingers with saltwater switches, similar to those used by fisherman, if NMFS wants to swap pingers with them to test operational characteristics),
- pingers should be neutrally buoyant – the net now lies flat for 3 or 4 fathoms on either side of the pinger because of the weight of the device, which keeps that part of the net from being used,
- NMFS should notify the current manufacturer (Dukane) of these concerns,
- an engineering contract is needed to address these concerns, and
- fisherman still need financial support for purchasing pingers.

Habituation and Displacement Research. Andy Read reported on current habituation and displacement research. Harbor porpoise initially are displaced when the pingers are turned on, but over time they approach the pingers more closely. The porpoise echolocation rate decreases when the pingers are on, but the reason for this behavior is unknown. There are two possible causes -- the porpoises are displaced or cease to echolocate in favor of using passive sound reception. Monitoring will continue as part of the observer program. Additional research could include: expanded use of click detectors to study whether harbor porpoise use echolocation differently or more frequently around standard or pinger nets, using logging devices for individual animals, and testing pingers with different kinds of acoustic signals.

Long-term Ecosystem Impact Research. Dr. Merrick reported on long-term ecosystem research associated with the Plan. This focused largely on a series of vessel and aircraft surveys conducted by the Center during the spring of 1999 which showed the distribution of harbor porpoise was further offshore than most of the HPTRP zones in the southern Gulf of Maine. (See Attachment E for a copy of the overheads from the meeting.) During discussion the following concerns were raised by TRT members about the significance of the results:

- Weather is a factor in evaluating the data –NEFSC staff noted that, while sighting conditions can considerably bias the results, these surveys were done in flat, calm weather (Beaufort 2 or less).
- There is greater incidence of abundance and bycatch in March -- NEFSC staff noted that surveys were conducted during March-April in the Gulf of Maine and Georges Bank areas. This is one of the periods of peak bycatch in the area, thus the reason for focusing the study on this period.
- Data were also presented on results of herring and mackerel surveys. Discussion then focused on the relationship between the distribution of porpoise and their prey. It was suggested that migration of prey species, particularly herring, may be affecting harbor porpoise distribution patterns, and that NMFS needs the ability to make changes to the porpoise plan depending on the prey species and fishery management actions affecting the prey stocks. This is an important point for understanding ecological relationships between porpoise and their prey. However, the limited "real-time" data on prey distribution makes it relatively difficult to implement management measures within the TRT context based on these relationships.

NMFS will make available upon request data supplied by the Center concerning variables and sightings from this work.

Estimate of Gillnet Fleet Size. Marjorie Rossman of the Center presented an estimation of the 1998 Gillnet Fleet Size. See "Estimation of 1998 Gillnet Fleet Size." Some TRT members questioned the usefulness of the dealer data, suggesting instead that VTRs be used for this purpose because they provided a more accurate picture of vessel activity, type of gear and actual effort expended by a vessel. At this point in time, the VTRs do not provide a census of the gillnet fleet. Therefore, the Center is restricted to using the dealer reports to estimate the size of the gillnet fleet. The VTRs are used to determine where effort (*i.e.,* landings) is coming from (*i.e.*, ports, offshore, and closure areas) and are thus an integral part of the bycatch analysis process.

Financial Support for Fisherman. Chris Mantzaris indicated that NMFS has not identified funding yet to provide financial assistance to fisherman to purchase pingers, although NMFS is continuing to look. Suggestions for possible sources of funds included Fish and Wildlife Foundation challenge grants, the Northeast Fishery Management Council, and making pingers an authorized capital expenditure. Buy-back programs for permits also were mentioned as a potential source of funds.

<u>Bycatch- during 1998 and January-August 1999</u>

The TRT reviewed the bycatch estimates and observed takes, as well as the methodology for calculating the bycatch estimates, presented by Marjorie Rossman of the Center. (See the

document entitled “Gulf of Maine Harbor Porpoise Bycatch.”) Total estimated bycatch for the Northeast Sink Gillnet Fishery during 1998 and through August 1999 was 332 and 184, respectively. There were 7 observed takes in the Gulf of Maine and zero in the Mid-Atlantic from September to December, 1999. NMFS noted that information collected to date suggests that the bycatch estimate for 1999 could be close to PBR. The full 1999-bycatch estimates were expected to be available in late March.

For 1999 takes of harbor porpoise in nets with pingers, it is not known whether the pingers actually were active. NMFS makes the assumption that if there is a pinger on the net the pinger is active. The TRT made a number of recommendations for further research on pinger performance. (See Attachment D.)

Methodology for Calculating Bycatch. The sources and uses of data relevant to estimating bycatch are dealer landings data (also known as "weighout" data that are used for the unit of effort, and the VTRs that are used to determine where in the ocean the landings come from. Both data sources contain information on gear type. There currently is no way of directly linking a VTR record to a dealer landing slip. The existing methods of data collection for Northeast Fisheries are expected to change, and NMFS anticipates that a method of linking the VTR and dealer data will be included in these changes.

The TRT discussed the unit of measure for the “effort” component of the formula for estimating bycatch. As in previous years, NMFS and the Center still consider tons of fish landed to be the best estimate of effort to use for estimating bycatch. The term “landings” is used for the portion of the catch that is actually sold. Concerns were expressed by some members about the reliability of landings because new landing restrictions seemingly result in high levels of discarding, not reflected in the landings data used to estimate bycatch. Fishing industry representatives also expressed concern that fishing effort attributed to gillnets in dealer weighout reports may be attributable to other types of gear.

The Center would like to identify other units of effort, which could provide a more precise method for estimating bycatch; however, at this time, there is no other unit of effort the Center and others consider reliable. The VTR logbooks theoretically represent a potential source of alternative units of effort, although they do not currently provide reliable information. These logbooks are not always submitted on time (or at all), and logs that are submitted are not always filled out properly or may not be complete. Other issues of concern with the VTR data include the presence/absence and reliability of discards and the tracking of “transient” vessels.

Results of Analysis of Gear Characteristics, Fishing Practices and Fish Catches. See “Characteristics of hauls that had harbor porpoise bycatch.” This is work in progress, and the Center has not reached any conclusions yet. However, the data support field observations. The TRT proposed the following:

- focus on particular areas to see how they affect bycatch rates;
- describe the GAM (generalized additive models) analysis further and include variables about closure areas, and use to draw trends about how to manage system;
- display data by pre-Plan and post-Plan by area;

- determine the bycatch rate in non-pingered nets, assuming a good comparison area can be identified; and
- break out bycatch rate by target species.

The TRT also raised questions about the meaning and use of the variable "escape panel" on Table 5 of the Analysis. The term escape panel as used in the table by the Center refers to the space between the nets at the bridle. It was noted that, when pingers are tied between panels, the escape portion is weighed down and the pinger may rip the net. The Center will report to the TRT the exact definition of an escape panel. The Center also will investigate whether there are any trends from decreased string length. A few members of the TRT suggested that this could lead to a unit of measure other than tons landed for effort. The Center will undertake an additive model analysis retrospectively to attempt to determine which factors are responsible for reductions in bycatch.

Stranding Levels through 1999. See the "Overheads from David Potter" for information about strandings. Approximately half of the stranded animals from the Mid-Atlantic showed signs of fishery or other human interaction, while few in the Gulf of Maine had signs of human interaction.

The TRT discussed the implications of this data, including the possibility that strandings will increase if the harbor porpoise population increases and whether there was anything happening in the population generally that could cause the strandings. No general population related cause has been identified for most strandings. A concern was raised about the possibility that dead animals were being counted more than once. In response, it was pointed out the all animals an observer sees are tagged and the tags are left on if the animal is caught again. Because the Mid-Atlantic plan recently became effective, there is a need to evaluate whether gear modifications were working differently in the Mid-Atlantic.

Seal Interactions. Mike Levine of Boston University provided information about a recent study on seal interactions with pingered and non-pingered nets. During 1995-1998 there were significantly greater numbers of seals caught in pingered nets than expected compared with non-pingered hauls. Seal bycatch was greater in the spring months than in the fall. The greatest amount of seal bycatch was for hauls set in pingered nets for mixed flounder in 1996 and 1997. The study did not evaluate seal damage to landed catch.

Some fishing industry representatives believe that seals represent a severe problem and the seal population needs to be controlled. All seal species, in particular the harbor seal, are increasing in number. They suggested that declines in herring and other changes to the seals' prey species are impacting the bycatch of seals. The bycatch and catch depredation interactions between seals and gillnets existed before the use of pingers. It has been suggested that the pingers act as a "dinner bell" for seals and therefore escalate the interactions. The TRT believed it is important to understand the relationship between seals, gillnets, and pingers. To minimize potential seal attraction to the pingers, a suggestion was made to limit pinger frequencies to levels above the hearing threshold of seals but within the hearing range of harbor porpoises (e.g. above 45-50 kHz). The TRT made a recommendation regarding testing pingers with higher frequencies. (See Attachment D.)

Operational Research. Dave Potter reported on the projects to test pingers in active use on deployed fishing gear. He also updated the TRT on the hydrophone developed for use by the U.S. Coast Guard in testing whether pingers are working while conducting at-sea enforcement. *Observer Coverage*. See "Observer Coverage Winter, Summer, Fall (dated December 13, 1999)."

1999 Population Estimate. See the "Abundance Estimate of Gulf of Maine/Bay of Fundy harbor porpoise." A correction was noted for the Population Status information of the Abundance Estimate (page 5) – the R_{Max} factor should be .04, not .4 as listed. Dr. Palka reported that the abundance estimated from the 1999 summer survey was partially complete. The area surveyed by the airplane was not completely analyzed. According to the partial estimate, it was expected that the abundance estimate resulting from the 1999 survey will be similar to those from previous surveys or possibly larger. Thus it was expected that the PBR would also increase. NMFS will provide this information to the TRT when available.

A question was raised about when NMFS will determine what constitutes stability for the harbor porpoise population, an optimal number for the population. In response, NMFS indicated that PBR was designed to address the notion of population stability and there would be no target goal unless the harbor porpoise was listed under the Endangered Species Act. A TRT member also noted that PBR can change only after it goes through the stock assessment process. Accordingly, the PBR will be updated in the 2000 Stock Assessment Report.

Long-term Goals -- Zero Mortality Rate Goal.

NMFS has not yet finalized the definition of ZMRG but is using an interim definition of 10% of the PBR for each stock. NMFS will ask the TRT to consider measures to achieve ZMRG at a future meeting.

Upcoming Management Actions that may affect the Harbor Porpoise Take Reduction Plan

The TRT heard presentations on the status of, and discussed, future groundfish management actions under the Northeast Multispecies Fishery Management Plan (FMP) that will affect the HPTRP, including the potential removal of the year-round Western Gulf of Maine closure and potential closure of additional areas. Some TRT members expressed concern that the Council's closure options were in the process of being developed and analyses were not available to determine the extent to which FMP closures or the Plan may have contributed to bycatch reductions in 1999. A TRT member suggested that the Center conduct an analysis to estimate what harbor porpoise bycatch levels would have been in 1999 without the Plan rules and new FMP closures. The TRT adopted a recommendation regarding coordination between the Plan and Fishery Management Actions. (See Attachment D.)

Report on Upcoming Research Activities

Possible future research activities or questions include:

- ensuring that observer coverage is appropriate;

- studying changes in practices that have not been recognized;
- analyzing potential changes in Fishery Management Plans, including whether there is any correlation between bycatch and fishery management closures;
- analyzing the impact of inter-annual variability of harbor porpoise on bycatch;
- how/why pingers are effective;
- how soak time or increasing or decreasing string length affects bycatch;
- is fishing occurring in new areas and are those areas covered by observers;
- are changes in target species affecting bycatch; and
- the impact of both reported and unreported discards on the estimation of bycatch.

The TRT adopted recommendations regarding additional research. (See Attachment D.)

Alternative Bycatch Reduction Methods. The TRT discussed enhanced acoustically reflective netting and higher or variable frequency pingers as possible alternative methods to reduce bycatch. The theory behind enhanced reflectivity netting is the net contains material that increases acoustic target strength. Although there have been two partial tests in the Bay of Fundy with another one planned for Summer 2000, additional quantification is needed.

Pingers with higher frequency (above 45 kHz) and irregular signals should be tested. In addition, a tool is needed to measure pinger operation. The current pinger frequency and parameters are a function of availability, and there is good evidence (from pinger studies in other areas of the world) that harbor porpoise will respond to higher frequencies. The TRT adopted recommendations regarding testing these methods. (See Attachment D.)

Members of the TRT also expressed support for Dr. Palka's efforts to assess harbor porpoise bycatch rates given different variables such as net length, twine diameter, soak time, among others.

Future Meetings of the TRT.

The TRT discussed the frequency of future meetings. The TRT would like to meet once or twice a year, particularly if PBR is not met. The TRT could meet less frequently if below PBR. Some TRT members would like to meet in 2000 if analyses become available to evaluate the effectiveness of 1999 measures under the Plan and the FMP to reduce bycatch.

The meeting adjourned at 3:45 p.m.

Attachments

A - Meeting Participants
B - Meeting Agenda
C - List of Key Documents Distributed at the Meeting
D - Consensus Recommendations
E - Overheads from Dr. Richard Merrick’s Presentation on Long term Ecosystem Research Associated with the Harbor Porpoise Take Reduction Plan

Attachment A

Meeting Participants
[TO BE INSERTED]

Attachment B

1999 HARBOR PORPOISE TAKE REDUCTION TEAM MEETING

December 14-15, 1999

Sheraton Ferncroft, 50 Ferncroft Road, Danvers, MA 01923.
Reservations: 1-800-325-3535; Phone: 978-777-2500; Fax: 978-750-7959

DRAFT AGENDA

Tuesday, December 14 (9:00 -- 5:30)

9:00 - 9:30 Welcome and Introduction *(Chris Mantzaris)*

- Introduction of new members *(Chris Mantzaris)*
- Statement of meeting objectives *(Chris Mantzaris)*
- Review and approval of agenda *(Robert Fisher)*
- Preparation of report from this meeting *(Robert Fisher)*

9:30 - 10:30 Overview of Activities Since the Last (December 1997) Meeting

- The TRP development & implementation schedule *(Kim Thounhurst)*
- NMFS decision on proposed ESA listing *(Donna Wieting)*
- Settlement agreement from CMC/HSUS lawsuit *(Kevin Collins)*
- Summary of bycatch for 1998-1999 *(Debra Palka)*

10:30 - 10:45 **Break**

10:45 - 12:15 Review and Discussion of HPTRP Elements and Related Management Activities

A. Regulatory
   1. Review of closures
      a. Harbor Porpoise TRP *(Kim Thounhurst)*
      b. Atlantic Large Whale TRP *(Kim Thounhurst)*
      c. Fishery Management Plans -- after Framework 25 and through 1999 *(Chris Kellogg)*
   2. Status of mandatory pinger certifications *(Glenn Salvador)*
   3. Compliance *(Chris Mantzaris)*
   4. Operational concerns from industry *(Kim Thounhurst)*

B. Non-regulatory
   1. Habituation and displacement research *(Andy Read)*
   2. Long-term ecosystem impact research *(Andy Read and Richard Merrick)*
   3. Estimation of gillnet fleet size *(Marjorie Rossman)*
   4. Financial support for fishermen *(Chris Mantzaris)*

5. Operational research *(Dave Potter)*
   a. testing pingers
   b. hydrophone development
6. Training and outreach *(Glenn Salvador)*
7. International findings *(Debra Palka)*

12:15 - 1:15 **Lunch** *(on your own)*

1:15 - 2:45 Review and Discussion of HPTRP Elements and Related Management Measures, Continued

2:45 - 5:30 *(with break)* Overview and Discussion of 1998 and January-July 1999 Bycatch

- Features of the 1998-99 fishery observer program *(NEC)*
  1. Coverage
  2. Lack of compliance in some areas
- Northeast sink gillnet fishery *(Marjorie Rossman)*
- Mid-Atlantic coastal gillnet fishery *(Marjorie Rossman)*
- Canadian fisheries *(TBD)*

5:30 **Adjourn for the day**

Wednesday, December 15 (8:00 - 3:30)

8:00 - 8:15 Review agenda

8:15 - 9:45 Overview and Discussion of 1998 and January-July 1999 Bycatch, Continued

- Observed bycatch since July 1999: are we below PBR? *(Richard Merrick)*
- Schedule for subsequent bycatch estimates *(Richard Merrick)*
- 1998-1999 stranding levels & 3 November 1999 meeting *(Richard Merrick)*
- Results of analysis of gear characteristics, fishing practices, and fish catches associated with bycatch rates in both U.S. fisheries *(Debra Palka)*
- Seal interactions with pingered nets *(Richard Merrick and M. Levine)*

9:45 - 10:00 **Break**

10:00 - 11:00 Report on the Status of the GOM/BOF Harbor Porpoise Population

- Population estimate, minimum population size, and current PBR *(Debra Palka)*
- Population viability analysis *(Debra Palka)*
- Status of the 1999 population estimate *(Debra Palka)*
- Stock structure research *(Andy Read)*
- Implications of stock structure issues *(Kim Thounhurst)*

11:00 - 11:30 Overview and Discussion of the Long-term Goals of the HPTRP

- Zero Mortality Rate Goal (ZMRG) definition *(Donna Wieting)*
- Schedule for development of measures to reach ZMRG *(Kim Thounhurst)*

11:30 - 12:00 Upcoming Management Actions that May Affect the HPTRP

- Fishery management plan (FMP) restrictions *(Chris Kellogg)*
  1. Multispecies FMP
  2. Monkfish FMP
  3. Dogfish FMP
- Atlantic Large Whale TRP *(Chris Mantzaris)*

12:00 - 1:00 **Lunch** *(on your own)*

1:00 - 2:00 Report on Upcoming Research Activities

- 1999 harbor porpoise population estimate *(Debra Palka)*
- Assessing reasons for reduced bycatch *(Richard Merrick)*
- Alternative bycatch reduction methods
  1. Other pinger designs/frequencies *(Scott Kraus)*
  2. Enhanced acoustically reflective gillnet study *(TBD)*
- Year 2 of TRP monitoring *(Richard Merrick)*

2:00 - 3:00 Other items

- Passamaquoddy porpoise update *(Kevin Collins)*
- Potential Canadian aboriginal take *(TBD)*
- Status of funding for implementation of the HPTRP *(Chris Mantzaris)*
- Discussion of evaluation of the TRT negotiation process *(Katie Moore)*

3:00 - 3:30 Next steps *(Robert Fisher)*

- Identify information needs for Year 2 of the HPTRP
- Future meetings
  1. Frequency
  2. Communication between meetings
  3. Other

3:30 **Adjourn**

Attachment C

Key Documents Distributed at the Meeting

Harbor Porpoise Take Reduction Team Plan Development and Implementation Timeline (as of December 13, 1999)

Multispecies Framework Adjustments 25-27

Multispecies Area Closures Options for 2000 –2001 Fishing Year

History of Bycatch Estimates of the GOM/BOF Harbor Porpoise Population
Estimation of 1998 Gillnet Fleet Size

Gulf of Maine Harbor Porpoise Bycatch for the December 14-15, 1999 Gulf of Maine Harbor Porpoise Take Reduction Team Meeting

Analysis of gear characteristics and fishing practices associated with bycatch in the Northeast multispecies sink gillnet fishery

Observer Coverage Winter, Summer, Fall (dated December 13, 1999)

Overheads from David Potter (August to December 1999) concerning strandings

Attachment D

Gulf of Maine Harbor Porpoise Take Reduction Team

Consensus Recommendations from December 14-15, 1999 Meeting*

1. When there is a take, check [whether] pingers on both sides of the actual take [are functioning], wherever [the take] occurs on the net. Include [this requirement] in observer protocols.

2. NMFS [should] review VTRs to determine the problems [resulting in] VTRs not [being] considered reliable data. [NMFS should] use [this information] for education [and] conduct outreach with industry. NMFS [should prepare] a summary of [the] Center's comparison of dealer info and VTR's and distribute [it] to [the] TRT.

3. [NMFS should] go back to recommendations in the [TRT's initial] plan about the unit of measure for effort and automating reporting.

4. [NMFS should] clarify [the] impact of discards on [the] bycatch rate estimate, [bycatch] total and reliability of data.

5. NMFS should prepare a plan, and present [it] at the next TRT meeting, for systematically and consistently enforcing the reporting, pinger and other requirements jointly with [the] Coast Guard.

6. [The] Center should undertake a retrospective analysis of pinger data – with weighout data and 100% observer status – for [evaluating] different methods of estimating bycatch.

7. [The]Center [should] continue to support and develop a fishing gear study.

8. Observers should check whether pingers are working, random[ly] [select a string and] sample every pinger on [that] string. Do not hinder operation of vessel. Incorporate [this requirement] into [the observer] protocol. NMFS should provide notice of [the] change in protocol.

9. NMFS [should] provide [the] TRT with [an]:
   - analysis of [applicable] "Council" and ASMFC plans when made available if there are impacts on the Plan and Harbor Porpoise, [and]
   - estimate of bycatch for each Council option.

10. NMFS should monitor Council deliberations in-person and [the] impacts [on] bycatch and make comments relative to the Plan.

* These consensus recommendations are verbatim from the language on the flipchart notes from the meeting, although in some places words have been added in brackets for context.

11. [NMFS should] allow higher frequency pingers -- 50 khz to 100 khz -- to be used in an experimental fishery with observer coverage.

12. [The TRT] endorses experiment in Bay of Fundy on reflective netting. [NMFS should] provide observer coverage if [reflective] net being used and NMFS [should] accommodate use of [the reflective] net wherever possible.

Attachment E

Overheads from Dr. Richard Merrick's Presentation on
Long term Ecosystem Research
Associated with the Harbor Porpoise Take Reduction Plan